

Lisa Daniels Columbia, Missouri March 6, 2003







Windustry Institute for Ag & Trade Policy

- newsletter
- www.Windustry.org
- provide information and technical assistance for wind energy development
- online tools for evaluating distributed project feasibility
- Wind Farmers Network

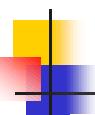




Windustry's WindFarmers Network

- A network for landowners, farmers, ranchers, farm organizations, businesses, community leaders and others
- A membership-based exchange for case studies, individual experiences, lessons learned, negotiating points and more
 - More info on Wind easements
- Online at www.windustry.org





Wind Easements

- No standards
 - Some good, some bad, some ugly
- Long Term
 - Range from 20 years to perpetuity
 - Most common 20-40 years
- Main benefit why this is so popular
 - A way to participate in wind development with no cash outlay from landowner





Easements Lessons Learned

Best results when landowner has good info on:

- The area's wind resource
- Wind developer's history
- Wind energy project economics
- Stays involved with siting of machines and roads
- Size of machine developer will use matters if easement is based on a percent of revenue

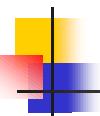




Easements Lessons Learned

- Overall wind easements arrangements from the landowners perspective are improving
- Negotiating on a broad area with neighbors has advantages
 - For example:
 - North Dakota negotiated on a county-wide
- Consult your attorney before signing anything





Harvest the Wind

- Lease Land to a wind developer
- Form an ownership entity for commercial-size project
- Install a wind turbine on your land to produce your own electricity (small size turbine)





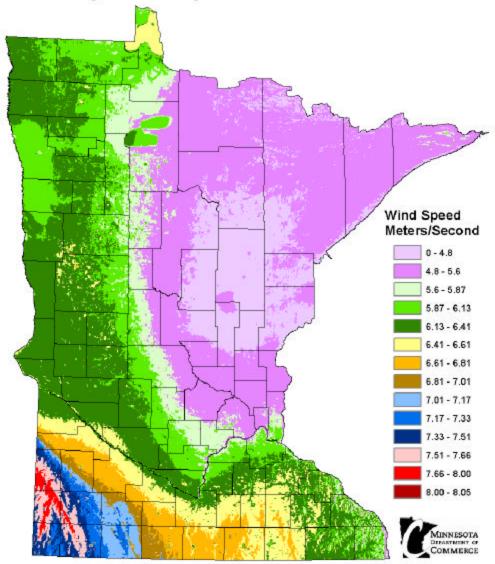
What makes a good wind project?

- Average wind speed
- Proximity/access to the utility grid
- Cost of capital
- Federal and State incentives





Minnesota's Wind Resource by Wind Speed at 50 meters

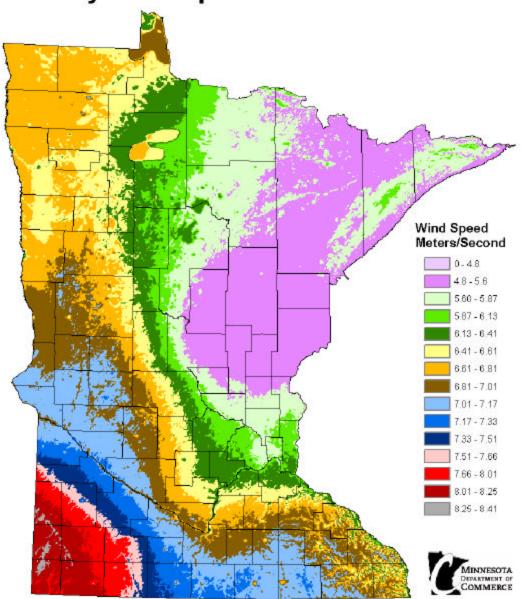


The Department of Commerce prepared this map using the Windkiap program, which takes into account whild data, topography, and land use characteristics. Data is averaged over a cell area 190 meters square, and whiln any one cellithere could easily be featured that could increase or decrease the results shown as this map. Regions with the greatest concentrations of monitoring also show the most account results. This

One of Minnesota's Wind Energy Assets



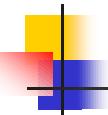
Minnesota's Wind Resource by Wind Speed at 70 Meters



Up to date wind Measurement program.



The Department of Commerce prepared this map using the WindMap program, which takes into account wind data, topography, and land use characteristics. Data is averaged over a cell area 750 maters equive, and within any one cell there could easily be features that could increase or decrease the results shown on this map. Regions with the greatest concentrations of monitoring state show the most accurate results. This map shows the general variation of Minnesota's wind resource and should not be used to determine the performance of specific projects.



State Resources

- State Energy Office
 - Missouri Department of Natural Resources Center: www.dnr.state.mo.us/energy
- Wind Powering America Missouri
 - www.windpoweringamerica.gov





Non-Governmental Orgs.

- Union of Concerned Scientists
- Farm Commodity Orgs. American Corn Growers Assoc.
- Western US Harvesting Clean Energy
- Land and Water Fund of the Rockies
- SEED Coalitions (Sustainable Energy for Economic Development)
- Local Organizations & Coalitions
 - Heartland Renewable Energy Society





US DOE Info Sources

- National Renewable Energy Laboratory (NREL)
 - www.nrel.gov
- Wind Powering America (WPA)
 - News, events and regional information
 - www.windpoweringamerica.gov
- National Wind Coordinating Committee (NWCC)
 - www.nationalwind.org

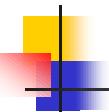




(AWEA) American Wind Energy Association

- National trade association for US wind industry
 - www.awea.org
- Member directory
 - Source of information about wind energy, companies and consultants
- Wind projects
- Resource library
 - Fact sheets and other publications





Periodicals

- Examples:
 - Successful Farming
 - Progressive Farmer
 - Home Power Magazine
- Sometimes information is of mixed quality

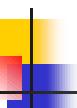




US Dept of Agriculture

- Energy Title in the Farm Bill is hanging on by a thread but still alive - there are other areas of Farm Bill that support renewable energy ie. RUS and Rural Development
- There will be a Notice of Federal Request for Proposals later this spring
- Tune in to our website for up-to-date info
- www.windustry.org





In Closing

- Wind technology is here and the information is available.
- This is a 25 year crop. Do your homework:
 - know the value of your wind and your land (or site)
 - Ask questions and know the info sources
 - Discuss with neighbors
 - Consult your attorney
- Consider your options with a short term and long term view. What are your goals?

